

# **DYSMENORRHEA**

## **I. INTRODUCTION**

Dysmenorrhea, painful menstruation, is one of the most common gynecologic disorders. It is the greatest single cause of lost work and school days among young women. Dysmenorrhea may be primary, with no associated organic pathology, or secondary, with demonstrable pathology.

Primary dysmenorrhea is caused by prostaglandin-induced uterine contractions. Primary dysmenorrhea tends to occur with the onset of ovulatory cycles and usually improves with time, coincides with the onset of menstrual bleeding, and frequently is associated with other prostaglandin-mediated symptoms such as nausea, vomiting, diarrhea, and dizziness. The pain is sharp and crampy, and is located in the lower midline. The pelvic examination in a nonmenstruating client with primary dysmenorrhea should not demonstrate tenderness or other pathological changes.

Secondary dysmenorrhea means pelvic pain caused by (secondary to) a disorder or disease. Secondary dysmenorrhea most commonly begins in women who are in their late teens or early twenties and progressively worsens. The pain may begin long before menses and continues during and even after menses. Dyspareunia is also common. Gynecological problems that can cause secondary dysmenorrhea include pelvic inflammatory disease, leiomyomata, endometriosis, adenomyosis, and intrauterine device use. Menorrhagia is not uncommon. The pain of secondary dysmenorrhea often occurs in both lower quadrants. When evaluating a client with crampy pelvic pain, one must be sure to consider the possibility of infection or early pregnancy with associated sequelae. Pelvic examination will demonstrate uterine and/or adnexal tenderness and possibly other findings such as pelvic mass, uterosacral nodularity, or fixation of the uterus with poor mobility.

## **II. PLAN OF ACTION**

### **A. History**

1. Take a detailed gynecological history to include age, parity, first day of last menstrual period, age of menses onset, length and regularity of cycles, and duration of flow.
2. Take a pain history to include severity, duration, character, location, radiation and the relationship of pain to menarche, menses, Mittelschmerz, coitus, bowel movements, voiding and any other associated symptoms.
3. Document previous known or suspected pelvic problems.
4. Review the past obstetric history, including first trimester losses.
5. Review the past history for other organ system problems that can present with pelvic pain.

6. Review the pelvic infection history, with special attention to recent or past STIs including the history of STIs among current or former partners.
  7. Review the contraceptive history with special attention to past or present IUD use and oral contraception. Document any changes in symptoms with the particular contraceptive use.
  8. Review the surgical history, including surgical procedures involving the cervix, Cesarean delivery, gynecological procedures, and other abdominal procedures.
- B. A complete gynecologic examination with cervical testing, including abdominal and rectal examination, should be performed with special attention directed toward reproducing the pain and detecting other diseases.
  - C. If secondary dysmenorrhea is suspected by history and examination, an appropriate evaluation for disease identification and treatment should be undertaken with physician consultation as indicated.
  - D. If primary dysmenorrhea is suspected by history and examination, medical treatment with prostaglandin inhibitors should be prescribed before proceeding with other diagnostic procedures.
  - E. Oral contraceptives should be considered for treatment of dysmenorrhea in women who desire contraception in addition to pain control. The combined oral contraceptives yield the best results with progestin-only contraceptives being less effective. Depo-Provera® may be used to decrease prostaglandin levels. LNG-containing IUD has been proven effective in the treatment of dysmenorrheal symptoms.
  - F. Over-the-counter prostaglandin inhibitors:

Drug name Tablet strength	Recommended dose	Maximum dosage in 24 hours
Aspirin 325 mg	325-650 mg q 4 h	3,900 mg
Ibuprofen (Motrin®, Advil®) 200 mg	200-400 mg q 4-6 h	1,200 mg
Naproxen Sodium (Aleve®) 200 mg	400 mg then 200 mg q 8-12 h	800 mg

- G. Severe dysmenorrhea may require prescription prostaglandin inhibitors (nonsteroidal anti-inflammatory drugs – NSAIDs). Contraindications to their use are a history of allergy to aspirin or a history of allergy to any NSAID. Caution is also needed for clients who have ulcer disease, kidney disease, or asthma.
- H. Prescription prostaglandin inhibitors:

Drug name Tablet strength	Recommended dose	Maximum dosage in 24 hours
Ibuprofen (Motrin®) 400, 600, 800 mg	400 mg q 4-6 h 600 mg q 6 h 800 mg q 8 h	3,200 mg
Mefenamic acid (Ponstel®) 250 mg	500 mg then 250 mg q 6-8 h	1,250 mg
Naproxen (Naprosyn®) 250, 375, 500 mg	500mg then 250 mg q 6-8 h	1,250 mg
Naproxen Sodium (Anaprox®) 275 mg (Anaprox® DS 550 mg	550 mg then 275 mg q 6-8 h	1,375 mg

### III. FOLLOW-UP

If the client fails a trial of either or both oral contraception and prostaglandin inhibitor therapies, further diagnostic studies including laparoscopy may be indicated and an appropriate physician referral initiated.

### REFERENCES

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3. ACOG. Health Care for Adolescents. 2003
4. Berek JS. Novak's Gynecology. 14<sup>th</sup> Ed., Lippincott Williams & Wilkins, Philadelphia, PA, 2007